

Application Serial No: 10/530,300
Responsive to the Office Action mailed on: May 12, 2008

REMARKS

This Response is in response to the Office Action mailed on May 12, 2008.
Claims 1-10 are pending.

§102 Rejections:

Claims 1-4 and 8 are rejected as being anticipated by Katayama (US Patent No. 6,272,610). This rejection is traversed.

Claim 1 is directed to a data recording device that records data into a semiconductor memory pack device that includes a plurality of flash memories performing recording operations in parallel that requires, among other features, a file management portion for managing data that is to be recorded into the semiconductor memory pack device as a file. The file management portion sets a data recording unit of data that is to be supplied to the semiconductor memory pack device to a common multiple of a size obtained by adding up the sizes of erase blocks of the plurality of flash memories and a data management size of the file management portion.

Katayama does not disclose or suggest these features. Katayama is directed to a file memory device that discloses 4-sector concurrent writing along with 2-sector concurrent writing and 1-sector writing for residual data less than four sectors at the end of write operation or data of a small file less than four sectors, and a unit erasure block of the four memory chips that has a size of 2048 bytes (see column 4, line 53-column 5, line 38 and Figures 10 and 11 of Katayama). Nowhere does Katayama disclose or suggest setting a data recording unit of data to a common multiple of a size obtained by adding up the sizes of erase blocks of the plurality of flash memories. Moreover, Katayama discloses that for both 2-sector and 1-sector writing, the data recording unit is set to 1024 and 512 bytes respectively. Thus, for 2-sector and 1-sector writing, the data recording units cannot be set based on a common multiple obtained by adding up the sizes of erase blocks of four flash memories, as neither 1024 bytes nor 512 bytes are common multiples of the size of a unit erasure block of the four memory chips (2048 bytes). Thus, Katayama does not disclose or suggest a file management portion that sets a data recording unit of data that is to be supplied to the semiconductor memory pack device to a common multiple of a size obtained by adding up the sizes of erase blocks of the

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plurality of flash memories and a data management size of the file management portion, as required by claim 1. For at least these reasons claim 1 is not disclosed by Katayama and should be allowed. Claims 2-4 and 8 depend from claim 1 and should be allowed for at least the same reasons.

§103 Rejections:

Claim 5 is rejected as being unpatentable over Katayama in view of Belu (US Patent No. 6,522,268). This rejection is traversed. Claim 5 depends from claim 1 and should be allowed for at least the same reasons described above. Applicants do not concede the correctness of this rejection.

Claim 6 is rejected as being unpatentable over Katayama in view of Haneda (JP No. 2000-57038). This rejection is traversed. Claim 6 depends from claim 1 and should be allowed for at least the same reasons described above. Applicants do not concede the correctness of this rejection.

Claim 7 is rejected as being unpatentable over Katayama in view of Saeki (US Publication No. 2001/0043803). This rejection is traversed. Claim 7 depends from claim 1 and should be allowed for at least the same reasons described above. Applicants do not concede the correctness of this rejection.

Claims 9 and 10 are rejected as being unpatentable over Katayama in view of Nishimura (US Patent No. 6,873,788) in view of Murray (US Patent No. 6,330,653). This rejection is traversed.

Claim 9 is directed to a data recording device that records data according to a FAT file system into a semiconductor memory pack device that includes a plurality of flash memories. The FAT file system manages a total number of sectors obtained by adding the number of existing sectors in the semiconductor memory pack device and the number of non-existing virtual sectors. Also, by storing a value that does not indicate a free region in FAT entries of clusters corresponding to the non-existing virtual sectors, the non-existing sectors will not be written into.

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The combination of Katayama, Nishimura and Murray does not teach or suggest these features. The rejection asserts that column 12, lines 12-27 of Murray teaches a FAT file system with virtual sectors. However, nowhere does Murray teach or suggest a FAT file system that manages a total number of sectors obtained by adding the number of existing sectors in the semiconductor memory pack device and the number of non-existing virtual sectors, as required by claim 9. Neither Katayama nor Nishimura overcome these deficiencies of Murray.

Also, the rejection asserts that column 5, lines 32-39 of Nishimura teach storing a value that does not indicate a free region in entries of clusters and that a person skilled in the art would have been motivated to combine Katayama and Nishimura so as not to overwrite on a file in a region that has been written into. However, claim 9 requires that by storing a value that does not indicate a free region in FAT entries of clusters corresponding to the non-existing virtual sectors, the non-existing sectors will not be written into. Thus, these features prevent writing of data into non-existing clusters, i.e., non-existing virtual sectors and are not intended so as not to overwrite on a file in a region that has been written into. Accordingly, there is no motivation to combine the features of Nishimura with Katayama. For at least these reasons claim 9 is not suggested by the combination of Nishimura and Murray and should be allowed. Claim 10 depends from claim 9 and should be allowed for at least the same reasons.

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Conclusion:

Applicants respectfully assert that claims 1-10 are in condition for allowance. If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Applicants' primary attorney-of record, Douglas P. Mueller (Reg. No. 30,300), at (612) 455-3804.



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Respectfully submitted,

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